

REMARKS

The Office Action mailed April 10, 2009 has been carefully considered. Within the Office Action Claims 21, 23, 26-28, 33, 34 and 41-45 have been rejected. The Applicants have amended Claims 21, 26-28, 33, 34, and 41-44 and have cancelled Claims 23, 45 and 46. The Applicants reserve the right to further pursue the cancelled claims in a continuation and/or divisional application as well as for appeal purposes. Applicants have also added new claims 47-50. No new matter has been submitted. Reconsideration in view of the following remarks is respectfully requested.

Election by Original Presentation

Claim 46 has been cancelled in the present response.

The 35 U.S.C. § 112 Second Paragraph Rejection

Claims 21, 23, 26-28, 33, 34 and 45 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter. These rejections are respectfully traversed. However, to expedite prosecution and clarify the claims, Applicants have amended Claim 31 to recite in the preamble, "A transport basket" which comprises a head plate, at least one tubular wall which delimits the housings in the claimed device. The transport basket also includes the fastening device. Support for the transport basket is found in Figure 1 and corresponding description in the specification. In particular, the specification states, "[a]s shown diagrammatically in Figure 1, when a fresh nuclear fuel assembly A has to be transported to the site of a nuclear reactor, it is placed inside a housing L provided for this purpose in side a basket designed so that it can itself be placed in a

transport packaging.” (Specification, Page 9, Lines 10-15). Withdrawal of the rejection is respectfully requested.

Rejection under U.S.C. § 102

Claims 21, 23, 26-28, 33, and 34 stand rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by either one of U.S. Patent No. 6,169,777 to Yoshizawa et al. (hereinafter “Yoshizawa”), who disclose an apparatus for transporting nuclear fuel assemblies, including a device for blocking a fuel assembly in a housing of a transport basket. Claims 41-44 stand rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by either one of U.S. Patent No. 5,490,186 to Gilmore et al. (hereinafter “Gilmore”), who disclose a connecting device adapted for use with a transport housing. The Applicants respectfully traverse.

According to the M.P.E.P., a claim is anticipated under 35 U.S.C. § 102(a), (b) and (e) only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.

Yoshizawa describes a fuel transport container having a basket that has a basket hole including at least two adjacent inner side walls to be fit to a fuel assembly for housing the fuel assembly element in the basket hole. The fuel assembly element is directly housed in the basket hole of the basket. The fuel assembly housed in the basket hole is slid by bias means toward the two adjacent inner side walls thereof without pushing the fuel assembly thereby biasing the housed fuel assembly so that the fuel assembly element is in contact with the two adjacent inner side walls of the basket hole. (Yoshizawa, Abstract).

Gilmore discloses a shipping container for a hexagonal nuclear fuel assembly including a plurality of grids which support fuel rods; and a bottom nozzle having an internal shoulder within a recess, a spherical taper, and a bottom end. The container include a top nozzle holder

secured to the support, plural grid supports secured to the support, plural clamping frames for clamping the grids, plural guide plates for guiding the fuel assembly between adjacent grid supports, and a bottom nozzle holder secured to the support. (Gilmore, Abstract).

Yoshizawa and Gilmore both merely illustrate the state of the art already described in the background section of Applicants' specification. The devices in the prior art are designed to maintain the fuel assembly within the corresponding housings of the transport basket in which they act along the whole length of the sides of the housings. This requires the thicknesses of the housings to be greater to thereby support the increased forces along the housings' entire length. This increased thickness results in a lesser number of fuel assemblies that can be housed in the baskets of the prior art.

In contrast, Applicants' transport basket, in an embodiment, includes a fastening device which is formed of a single connecting device that blocks the fuel assemblies within the housings and is fully located above the upper end piece of the fuel assemblies. The location of the connecting device thereby minimizes the thickness required in the housing to support the connecting device. This results in more fuel assemblies being accommodated for in a housing of a given size compared to that described in the prior art.

Claim 21 recites:

A transport basket for at least one fuel assembly having a polygonal section and comprising an upper end piece and a lower end piece, the basket comprising:

a head plate;

at least one tubular wall having an open end fixed on said head plate, the at least one tubular wall delimiting a housing able to contain a single fuel assembly, the housing having a polygonal section with a shape identical to the shape of the fuel assembly;

a fastening device for securing the fuel assembly in the housing,

wherein the **fastening device is formed of a single connecting device** configured to make a rigid connection between the upper end piece of the fuel assembly and the open end of the at least one tubular wall of the basket in a predetermined relative

position such that the upper end piece of the **fuel assembly bears directly in contact with two adjacent faces of the housing** and such that the fuel assembly is suspended by its upper end piece when the housing is oriented substantially vertically, **the connecting device being fully located above the upper end piece of the assembly.**

(emphasis added).

Considering that Yoshizawa does not expressly or inherently disclose that the fastening device is formed of a single connecting device, that the connecting device makes a rigid connection such that the upper end piece of the fuel assembly bears directly in contact with two adjacent faces of the housing; nor that the connecting device is fully located above the upper end piece of the assembly, Yoshizawa does not disclose each and every element/limitation in Claim 21. Accordingly, Claim 21 is distinguishable over Yoshizawa and thus in condition for allowance.

Applicants' Claim 41 recites:

A transport basket for at least one fuel assembly, the basket comprising a head plate, at least one tubular wall having an open end fixed on the head plate, each tubular wall configured to receive the at least one fuel assembly, and a fastening device for only securing the fuel assembly to the open end of the tubular wall, wherein the fastening device includes:

a body fixed to the head plate above the open end of the tubular wall;

a control device carried by the body within the open end of the tubular wall and configured to freely rotate along a longitudinal axis of the tubular wall, wherein at least a portion of the control device vertically moves along the longitudinal axis upon being rotated in a first direction;

a claw mechanism operably coupled to the control device **within the open end of the tubular wall**, wherein the claw mechanism is configured to pivot between a retracted position and an extended position in response to rotation of the control device, **wherein the claw mechanism is engageable to an upper end piece of the fuel assembly** and moves along with the control device in the longitudinal axis in response to the control device being rotated in the first direction.

(emphasis added).

Considering Gilmore does not expressly or inherently disclose a control device carried by the body within the open end of the tubular wall and configured to freely rotate along a longitudinal axis of the tubular wall, a claw mechanism operably coupled to the control device within the open end of the tubular wall nor the claw mechanism is engageable to an upper end piece of the fuel assembly, Gilmore does not disclose each and every element/limitation in Claim 41. Accordingly, Claim 41 is distinguishable over Gilmore and thus in condition for allowance.

Claims 23, 26-28, 33, 34, and 42-44 are dependent on Independent Claim 21. As stated above, Claims 21 and 41 are allowable over Yoshizawa and/or Gilmore. Accordingly, Claims 23, 26-28, 33, 34, and 42-44 are allowable for being dependent on allowable base claims.

New Claims

The Applicants have added new Claims 47-50 to the present application. The Applicants believe that these new claims are fully supported by the specification and no new matter has been added. Claim 47 recites a transport basket for at least one fuel assembly having a polygonal section and comprising an upper end piece and a lower end piece, the basket comprising: a head plate; at least one tubular wall having an open end fixed on said head plate, the at least one tubular wall delimiting a housing able to contain a single fuel assembly, the housing having a polygonal section with a shape identical to the shape of the fuel assembly, and a fastening device for securing each fuel assembly in its housing, wherein each fastening device comprises only one connecting device capable of making a rigid connection only between the upper end piece of the fuel assembly and the head plate of the transport basket in a predetermined relative position such that the upper end piece of the fuel assembly bears directly in contact with two adjacent faces of

the housing and such that the fuel assembly is suspended by its upper end piece when the housing is oriented substantially vertically, the connecting device being fully located above the upper end piece of the assembly and being capable of being fixed on the upper end piece of the fuel assembly by first clamping means including transverse displacement means capable of moving the upper end piece of the fuel assembly in a direction transverse with respect to the housing, towards the two adjacent faces of the housing and away from them, and axial displacement means, capable of moving the fuel assembly in a direction axial with respect to the tubular wall, away from the second end of the housing and towards said housing. The cited prior art references do not expressly or inherently disclose all the elements/limitations recited in Claim 47. Accordingly, Claim 47 is distinguishable over the cited references.

Claim 48 recites that the fastening device is configured to only act on the head plate. Claims 49-50 recite that the fastening device is formed of a single connecting device only acting on the head plate of the basket. Support of Claims 48-50 supported in Figures 1 and 2 and accompanying description in Applicants' specification. Additionally Page 4, Lines 7-15 specifies that the block device connects the upper end of the housing and may thus be placed in the housing above the assembly, whereby the thickness of the walls separating the adjacent housings can be minimized. (Specification, Page 4, Lines 7-15.) Allowance of new Claims 47-50 is respectfully requested.

Conclusion

It is believed that this reply places the above-identified patent application into condition for allowance. Early favorable consideration of this reply is earnestly solicited.

If, in the opinion of the Examiner, an interview would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at the number indicated below.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case. Please charge any additional required fee or credit any overpayment not otherwise paid or credited to our deposit account No. 50-3557.

Respectfully submitted,

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